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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,799	02/26/2002	Arend Jan Adriaanse	C7602(V)	7872

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UNILEVER  
PATENT DEPARTMENT  
45 RIVER ROAD  
EDGEWATER, NJ 07020

EXAMINER

DELCOTTO, GREGORY R

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/084,799

Applicant(s)

ADRIAANSE ET AL.

Examiner

Gregory R. Del Cotto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### **DETAILED ACTION**

1. Claims 1-38 are pending. Note that, throughout the claims, Applicant has used the terminology "preferably...". The Examiner has given the claims their broadest interpretation and not limited the scope of the claims to the "preferably..." clause; this is merely exemplary. It is suggested that Applicant delete the "preferably..." clause(s) from the claims.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-8, 11-22, 25-33, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/60044 in view of Getty et al (US 6,020,294).

'044 teaches catalytically bleaching substrates, especially laundry fabrics, with atmospheric oxygen or air. See Abstract. The bleaching is accomplished by treating a textile by contacting the textile with a ligand which forms a complex with a transition metal, whereby the complex catalyses bleaching of the textile by atmospheric oxygen. See page 4, lines 10-25. The bleaching compositions may be used for laundry cleaning, hard surface cleaning etc. See page 17, lines 15-30. The bleaching composition may additionally contain a surface-active material, optionally together with a detergent builder. The surface-active material may be naturally derived or a synthetic material selected from anionic, nonionic, amphoteric, zwitterionic, cationic, and mixtures thereof. See page 18, lines 15-25. The compositions also contain conventional additives such as lather boosters, lather depressants, alkaline buffering agents, fabric softening agents, perfumes, enzymes such as proteases, cellulases, lipases, amylases, and oxidases, etc. See page 21, lines 11-25. Transition metal sequestrants such as EDTA, EDTMP, etc., may also be included. See page 21, lines 25-35. Preferably, the pH is in the range of from 6 to 13. See page 18, lines 5-15.

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'044 does not specifically teach the use of a stabilizer or an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Getty et al teach automatic dishwashing detergent compositions comprising a source of hydrogen peroxide and a particularly selected cobalt catalyst. The source of hydrogen peroxide is any common hydrogen-peroxide releasing salt, such as sodium perborate or sodium percarbonate. See column 4, lines 25-40. The pH of the compositions is from about 7 to about 12. See column 4, lines 60-69. The preferred automatic dishwashing detergent compositions comprised one or more deterative enzymes. Suitable enzymes include bacterial amylases and proteases and fungal cellulases. Suitable examples of proteases are the subtilisins which are obtained from particular strains of *B. subtilis* and *B. licheniformis*. See column 12, lines 25-55. Additionally, the compositions may contain an enzyme stabilizing system which is compatible with the deterative enzyme such as a calcium ion, boric acid, propylene glycol, short chain carboxylic acid, boronic acid, and mixtures thereof. See column 15, lines 25-45.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use an enzyme stabilizer such as a calcium ion, boric acid, etc., in the cleaning composition taught by '044, with a reasonable expectation of success, because Getty teaches the use of a stabilizing agent

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such as boric acid, calcium ion, etc. in combination with a proteolytic enzyme in a similar bleaching composition to provide stability to these enzymes and further, '044 teaches the use of protease (proteolytic) enzymes in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a subtilisin, proteolytic enzyme in the cleaning composition taught by '044, with a reasonable expectation of success, because Getty teaches the use of a subtilisin, proteolytic enzyme in a similar bleaching composition and, further, '044 teaches the use of subtilisin enzymes in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because '044 in combination with Getty suggest an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Appel et al (US 6,242,409).

Appel et al teach catalytically bleaching substrates comprising applying to the substrate, in an aqueous medium, an organic substance which forms a

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complex with a transition metal, the complex catalyzing bleaching of the substrate by atmospheric oxygen. See column 2, lines 30-40. Suitable organic substances include N,N-bis(pyridin-2-yl-methyl)-1,1-bis(pyridin-2-yl)-1-aminoethane, etc. See column 13, lines 30-45.

The bleaching compositions may be used for laundry cleaning, hard surface cleaning etc. See page 17, lines 15-30. The bleaching composition may additionally contain a surface-active material, optionally together with a detergent builder. The surface-active material may be naturally derived or a synthetic material selected from anionic, nonionic, amphoteric, zwitterionic, cationic, and mixtures thereof. The compositions also contain conventional additives such as lather boosters, lather depressants, alkaline buffering agents, fabric softening agents, perfumes, enzymes such as proteases, cellulases, lipases, amylases, and oxidases, etc. Transition metal sequestrants such as EDTA, EDTMP, etc., may also be included. Preferably, the pH is in the range of from 6 to 13. See column 19, line 5 to column 21, line 45.

Appel et al do not specifically teach the use of a stabilizer or an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Getty et al are relied upon as set forth above.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a enzyme stabilizer such as a calcium ion, boric



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acid, etc., in the cleaning composition taught by Appel et al, with a reasonable expectation of success, because Getty teaches the use of a stabilizing agent such as boric acid, calcium ion, etc. in combination with a proteolytic enzyme in a similar bleaching composition to provide stability to these enzymes and further, Appel et al teach the use of protease (proteolytic) enzymes in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to use a subtilisin, proteolytic enzyme in the cleaning composition taught by Appel et al, with a reasonable expectation of success, because Getty teaches the use of a subtilisin, proteolytic enzyme in a similar bleaching composition and, further, Appel et al teach the use of subtilisin enzymes in general.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because Appel et al in combination with Getty suggest an aqueous cleaning composition having the specific pH containing a surfactant, a proteolytic enzyme, a stabilizer, a bleach catalyst complex, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

### ***Conclusion***

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2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (703) 308-2519. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

  
Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
August 20, 2003